FORECASTS AND SERVICES

SPOT FORECASTS

The 2004 fire season showed a significant decrease in spot forecasts compared to the past five years. The main reason for the diminished spot workload can be attributed to the transfer of zones 609, 610, and 611 to the Pendleton Forecast Office. Last year the Deschutes National Forest had 111 spot requests, about 45% of the seasonal total. The Portland office issued just 92 spot forecasts this season, or 37% of the 2003 total (249 spots). Figures 11 and 12 (pages 35 and 36) show the 2004 spot breakdown, by month, and the annual spot summary since 1991, respectively.

Wildfire spot requests dropped to a mere 21, compared to 132 in 2003. However, in 2003, the Deschutes National Forest had 57 of the 132-wildfire spot requests. The most active months this season were April (15 spots), June (18 spots), and August (21 spots). Tualatin Valley Fire and Rescue conducted a weeklong training session in August. This training exercise resulted in eight spot forecasts. Nearly all of the 2004 spot requests came from the Willamette National Forest, the Mt. Hood National Forest, or BLM units.

Prescription activities were evenly distributed from April to June, and in September through October. Most of the wildfire spot requests (62%) occurred in August. A lot of the August wildfire requests came from the Gifford Pinchot National Forest, specifically the McDonald Complex.

INTERESTING SPOT FORECAST TIDBITS FOR 2004

- The **FIRST** spot request for the 2004 season occurred March 30. The Willamette National Forest made the request for "Grandma's 41" prescribed burn. The **LAST** spot request for the season was October 22. The McKenzie district of the Willamette National Forest submitted the spot request for "Twister #16" prescribed burn.

- The **FIRST** wildfire spot was issued April 2, 2004 for a series of small grass fires due to downed power lines (hence the name "POWERLINES FIRE"). These small grass fires were on the McKenzie district of the Willamette National Forest. The **LAST** wildfire spot forecast was issued August 18, 2004 for the 138 FIRE, on the Sweet Home district of the Willamette National Forest.

- The most spot forecasts in one day: 3 on several days (the last August 16, 2004). This represented a major decrease from 2003 (6 on May 29, 2003 and September 3, 2003).

- There were 64 spot requests from the Forest Service (USFS), or just 30% of last year's total (215). The BLM made 18 requests, similar to 2003 (20 spots). Oregon Department of Forestry (ODF) submitted just two requests, one for a wildfire (June 19, 2004 for the Fanno Ridge fire). The other eight spot requests were from the Tualatin Valley Fire and Rescue for a training exercise.

- The 64 USFS spot requests were divided amongst the forests as follows: 33 for the Willamette, 24 for the Mt. Hood, and 7 for the Gifford Pinchot. The Siuslaw National Forest DID NOT make a spot request during 2004.

- The 18 BLM spot requests were split as follows: 13 spots from the Salem district and five spots from the Eugene district. All spots were for prescribed fire activities.

- There were 49 wildfire spot requests in September 2003, compared to **ZERO** this September. The lack of wildfire spot activity in 2004 is correlated to the transfer of the east side zones to Pendleton and also the severity of the fire season. There were no large fires (100 acres or Type II management level) in the Portland forecast area this year, compared to six large fires in 2003.

TURN-AROUND TIME

"Turn-Around Time" has been documented since the 2000 season. It is defined as the elapsed time between spot request receipt (or notification) and forecast transmission. The Web-based spot program makes this element very easy to monitor. However, some complications continue for prescribed burns. Quite often, the user-agency will submit a spot request the day before actual ignition. Obviously, turn-around time is not applicable in these cases. The precedent for the Portland office is to disregard turn-around time for requests submitted in advance of the actual burn time.

The Memorandum of Understanding (MOU) between the Pacific Northwest Wildfire Coordinating Group (PNWCG) and Western Region of the National Weather Service (NWS) states that required turn-around times are to be at least 45 minutes for wildfire spot requests and 60 minutes for prescribed burns, unless prior arrangements have been made. The Portland office achieved a turn-around time of 39.5 minutes for prescribed/training exercise requests (when turn-around time was applicable) and 33.1 minutes for wildfires. Average prescribed spot forecast turn-around time this year was about the same as 2003 (39.7 minutes). The 2004 wildfire spot forecast turn-around time was nearly a minute lower than 2003 (33.9 minutes).

The Portland office switched to a new web-based spot program this year. The new version required some additional training for the forecasters and users. Also, in October,

the NWS made significant changes to their web pages. These changes resulted in new URL's for fire weather home page and spot page. A higher turn-around time would have been expected due to the changes. Surprisingly, this was not the case.

The longest applicable turn-around time was 150 minutes (June 29 for the Stretcher Unit #3 prescribed burn). This was an unusual case, but not too out of the ordinary for prescribed burns. The request came in the morning, but the actual burn time was later in the afternoon. Prior arrangements were made with the user to have the spot forecast available after the regular afternoon fire weather forecast. Typical wildfire turn-around times were on the order of 25 to 40 minutes. The longest wildfire turn-around time was 55 minutes.

FIGURE 11 – 2004 SPOT FORECASTS (BY MONTH)

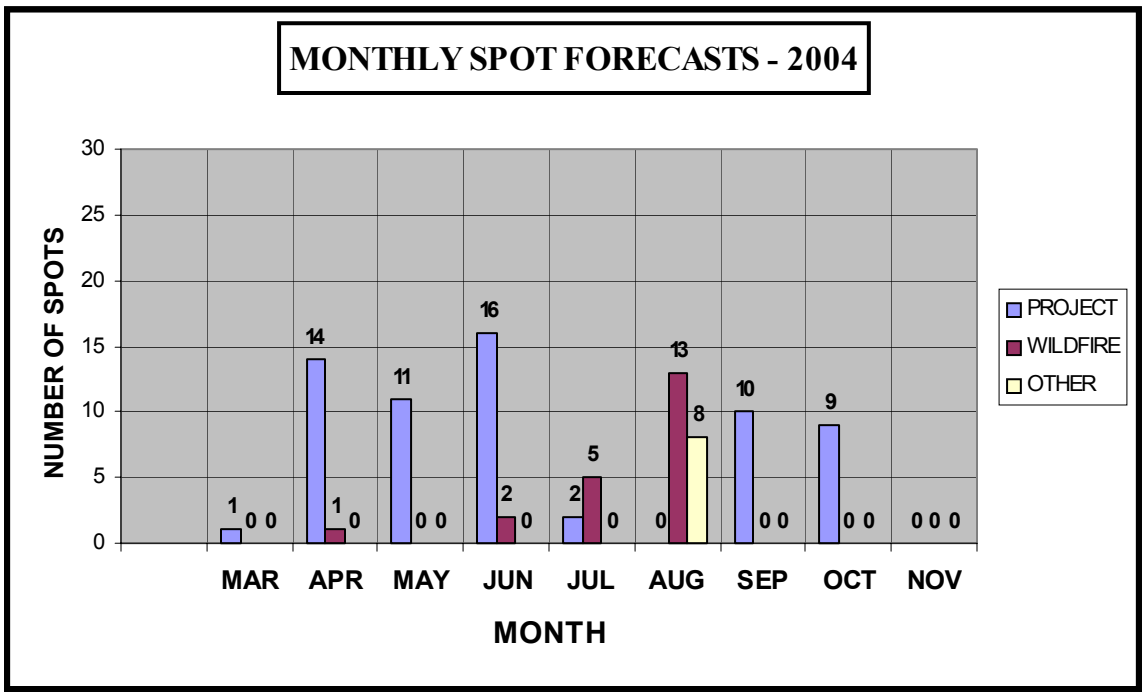


Table six (see next page) shows the annual spot forecast data from 1992 to 2004. The spot frequency showed a dramatic increase from 2000 to 2003, but due to the change in forecast area responsibility and agency requirements for prescribed burns, 2004 spot totals were much lower. Also, some units/districts curtailed prescribed burn activities in 2004 due to budget constraints, staffing concerns, or a number of other reasons.

The highest ERC value for the season in zones 602 and 603 was 60, on July 24th. An ERC value of 59 was observed on July 23rd.

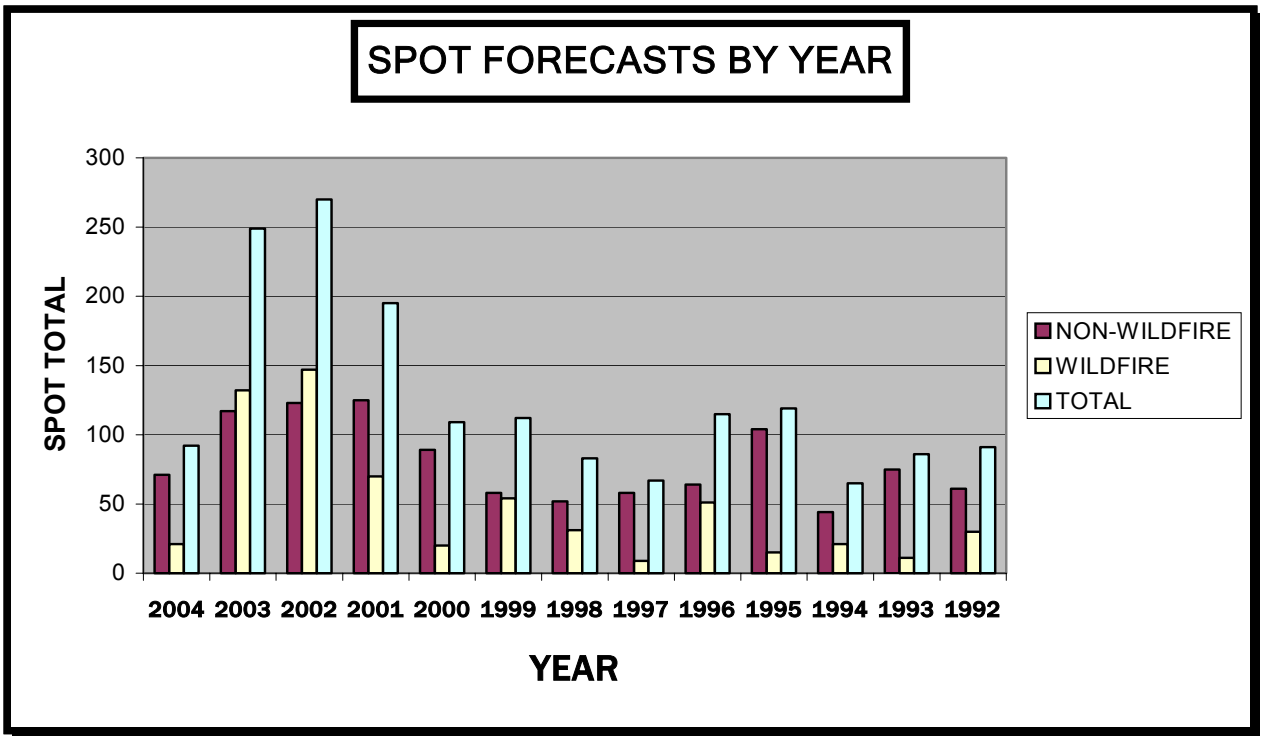
TABLE SIX – ANNUAL SPOT FORECAST DATA

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
PROJECT*	61	75	44	104	64	58	52	58	89	125	123	117	71
WILDFIRE	30	11	21	15	51	9	31	54	20	70	147	132	21
TOTAL	91	86	65	119	115	67	83	112	109	196	270	249	92

** = INCLUDES TRAINING SPOTS, SEARCH AND RESCUE, AND OTHER MISC. REQUESTS.*

Figure 12 (see below) shows the yearly spot breakdown from 1992 to 2004.

FIGURE 12 – ANNUAL SPOT FORECAST TOTALS



FORECAST SERVICES

The fire weather desk was staffed from March 22, 2004 through October 27, 2004. Full fire weather operations (7 days a week) commenced on May 23, 2004, about a week later than last year. Internet weather briefings (twice-a-week) started on May 31, 2004. Daily internet briefings started on June 21, 2004, which was about two weeks later than last year. Participation seemed rather constant. The same four to six users were on the call

most of the time. Internet briefings reverted to twice per week September 20, and then ended for good on October 18. The Portland office participated in daily "blast-up" calls set up by the Northwest Coordination Center. These calls started on June 22 and ended September 13. The "blast-up" calls were discontinued about three weeks earlier than last year. The Portland office also supplied one person to the Coordination Center from March through the end of October.

NFDRS forecasts started on May 23, 2004 and ended on October 16, 2004. Specific point forecasts continued for Village Creek, Pebble, and Fields RAWS. Verification is based on persistence forecasts. The Northwest Coordination Center compiles statistics at the end of the season to track forecast office performance. The NFDRS forecast statistics are collected for the period June 1 through September 30 (about 115 forecasts).

The baseline statistic is forecaster improvement over persistence. There are performance standards within the MOU to be met. These standards include 35 percent improvement for temperature, 25 percent improvement for humidity, and 10 percent improvement for wind. The Portland office came close to meeting the temperature and humidity standards (30 percent improvement for temperature and 23 percent improvement for humidity). These values nearly equaled 2003. However, the Portland office showed a substantial improvement in wind forecasts. This year, the average forecaster improvement over persistence was –2.02 percent. In 2003 the score was –12.39 percent. Wind is a difficult parameter to overcome persistence. The Portland office managed to beat persistence at six stations, but lost to persistence at seven sites. There seemed to be major problems with Goodwin Peak (zone 612). This was the most troublesome station, with a score of –40.24 percent. Elk Rock wind data (zone 660) was thrown out due to questionable data.

Last year, the Portland office ranked fifth (out of six) offices in Region 6 in NFDRS wind performance. In 2004, Portland was fourth. Portland ranked second in temperature forecast performance, and a close second in humidity forecast scores.

TRAINING AND EDUCATIONAL OUTREACH ACTIVITIES

Portland continued to be heavily involved in teaching and training activities. Table five shows all of the outreach activities from last fall to this summer (see page 38). The Portland office has several people involved. The S-190 through S-590 series has undergone major revisions. PowerPoint presentations have been developed, replacing the slides and overhead projection graphics. Portland continues to have some responsibility for teaching and training services for zones 609, 610, and 611 although Pendleton is the primary resource.

The lowest high temperature during the "active" portion of the fire season (July 1 through September 30) in zones 606 and 608 was 43 degrees at Boulder Creek RAWS on September 18th. Boulder Creek and Emigrant recorded highs of 53 degrees on August 22nd.

TABLE SEVEN – TRAINING AND EDUCATIONAL OUTREACH ACTIVITIES

DATES	ACTIVITY	AGENCY/USER	INSTRUCTOR
October 21, 2003	S-290	CENTRAL OREGON	SALTENBERGER
November 24-25	S-290	ODF, in Hood River	SALTENBERGER
December 15-18	S-290 (3 TOTAL)	LAKE OSWEGO F.D.	SALTENBERGER
December 1-5	S390/S490 RE-WRITE	USFS	SALTENBERGER, CADRE
February 1-2	EASTSIDE VISIT	ODF/USFS/BIA	WEISHAAR
February, 2004	S-290	CENTRAL OREGON	SALTENBERGER
February 23-24	S-290	BIA, WARM SPRINGS	SALTENBERGER
March 3	RX-300	USFS	SALTENBERGER
March 24	RX-300	USFS	WEISHAAR
March 7-19	S-590	USFS	SALTENBERGER, CADRE
April 10	S-290	ODF, in Oregon City	SALTENBERGER
April 12-13	S-290	USFS	SALTENBERGER
May 3-4	S-290	ODF, in Springfield	WEISHAAR
May 27	SEMINAR	USFS (MT. HOOD)	WEISHAAR
June	S-190	USFS	WILLSON
June 14-15	S-290	ODF	SALTENBERGER

IMET DISPATCHES

The 2004 fire season was rather benign, especially compared to the past two or three seasons. There were no "large" (100 acre or Type II or higher) fires in the Portland fire weather area during the 2004 season. The Portland office has two qualified Incident Meteorologists (IMET's). However, one IMET spent a majority of the season detailed at the Northwest Coordination Center to provide support for decision-making and resource allocation. This continues to be a very important mission to the Coordination Center.

The Portland office filled four IMET requests. Only one of the dispatches went the 14-day maximum (Pot Peak).

1. POT PEAK FIRE (15 DAYS)

IMET:	SCOTT WEISHAAR
DATES:	JULY 3 through JULY 17
LOCATION:	Okanogan /Wenatchee National Forest. Chelan district. I ICP at 25-Mile Camp.
IMT:	Pacific Northwest Type I (Lohrey). Transferred to Washington DNR Type II (Johnson).
CAUSE:	Lightning

2. LOG SPRINGS FIRE (8 DAYS)

IMET:	SCOTT WEISHAAR
DATES:	JULY 27 through AUGUST 4
LOCATION:	Simnasho Butte. Warm Springs BIA. ICP near Sidwalter Flat.
IMT:	Oregon Type II (West)
CAUSE:	Human-caused

3. HIGHLANDS COMPLEX (4 DAYS)

IMET:	JOHN SALTENBERGER
DATES:	AUGUST 19 through AUGUST 22
LOCATION:	Okanogan National Forest. ICP at Tonasket.
IMT:	Washington DNR Type II (Reed/Holloway)
CAUSE:	Lightning

4. BLAND MOUNTAIN #2 (8 DAYS)

IMET:	SCOTT WEISHAAR
DATES:	AUGUST 21 through AUGUST 28
LOCATION:	Oregon Department of Forestry. Douglas County FPA. Unit DG-1. ICP at Myrtle Creek Airport
IMT:	ODF Team (Mair/Savage)
CAUSE:	Under Investigation

2004 MAJOR FIRES

There were no "major" fires (requiring at least a Type II Incident Management Team) in the Portland Fire Weather area during the 2004 season.

FINAL SUMMARY

The 2004 fire season was short, and relatively quiet. There were significant precipitation events in June, late-August, and September. The end of the fire season occurred in late August due to substantial rainfall (on the order of several inches).

Spot forecast workload dramatically declined. Part of the decline can be attributed to the transfer of fire weather zones 609, 610, and 611 to the Pendleton office. The absence of "large" fire activity resulted in far fewer wildfire spot requests.

Refined Red Flag criteria were used in the 2004 season, and proved to be a big improvement over the 2003 criteria. There were four "problem" lightning episodes during the season, but no wind/low humidity cases.

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